



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,568	12/05/2001	Robert C. Knauerhase	884.624US1	7088
21186	7590 10/26/2006		EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			D'AGOSTA, STEPHEN M	
P.O. BOX 2938 MINNEAPOLIS, MN 55402			ART UNIT	PAPER NUMBER
			2617	
			DATE MAILED: 10/26/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Assistant Occurrence	10/004,568	KNAUERHASE ET AL.				
Office Action Summary	Examiner	Art Unit	_			
	Stephen M. D'Agosta	2617				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on 16 Oc	ctober 2006					
	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merit						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	, , , , , , , , , , , , , , , , , , , ,					
4)⊠ Claim(s) <u>1,2,4,5,7-23 and 25-27</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1,2,4,5,7-23 and 25-27</u> is/are rejected.						
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restriction and/or	election requirement					
are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite				
S. Patent and Trademark Office			_			

Art Unit: 2617

DETAILED ACTION

Continued Examination

The examiner notes the RCE received 10-16-2006 and has provided a new rejection below. The examiner is looking for novel material/claims which sets them apart from the prior art of record. While the claims have been (expertly) rearranged, they appear to recite similar material and are thus broadly interpreted.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 7, 9, 11-12, 14-22 and 25-27 rejected under 35 U.S.C. 102(b) as being anticipated by Silver (Unified Network Presence Mangement, 2000).

> Note, Silver is published in "2000" (no month specified) and the applicant's file date is December 2001, hence the examiner believes Silver was probably published between January and November 2000 (eg. a USC 102b rejection).

Claims 1, 7, 12, 18 and 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Silver's Unified Network Presence Management White Paper.

As per claim 1, Silver teaches a method comprising:

Determining at least <u>two</u> presence rule<u>s</u>, wherein <u>each</u> presence rule comprises a condition and a state (page 2, 3rd paragraph teaches use of an agent that predicts best method of contacting the user at a particular moment in time, at a given location, based on the user's availability, device capability and personal preferences which reads on condition, also see PMD/PSM defined on page 3, STATE discussed on page 4, 3rd paragraph);

Art Unit: 2617

and wherein <u>a first</u> condition is based on a location of <u>a</u> mobile device (page 2, 3rd paragraph teaches a "given location" which reads on the claim) <u>and wherein a</u> <u>second condition is based on a calendar;</u>

<u>based upon a current time and a current location of the mobile device,</u>

<u>determining whether the conditions are met (page 4, 4th paragraph teaches receiving notifications when presence data changes which reads on determining condition met/not met); and</u>

When either or both of the conditions are met, updating presence information for the mobile device with the corresponding states (again, page 4, 4th paragraph teaches receiving notifications if/when presence data changes which reads on the condition being met and updating presence data). Also see page 5, last paragraph which teaches a rules-based process whereby any change in an entity's network presence causes the exposed presence manager to re-evaluate any outstanding subscriptions and to notify qualifying watchers of the new presence – eg. a condition/state has been met and data will be/has been updated. This is further supported by Silver's example of a hotel guest registering (page 5, second to last paragraph, whereby the system is checking the condition of the user's registration – eg. they have/have not registered yet - and an indicator being generated based on the state of the registration – eg. update data when state is "user has registered"),

Silver teaches "A solution to this problem lies with the concept of Unified Network Presence Management in which a user's 'presence' is dynamically detected on a range of networks such that an agent can act as a personal communications manager that exploits the dynamic data trail as a user interacts with multiple communications services and devices across multiple networks. This presence data is interpreted by the agent to predict the best method for contacting the user at a particular moment in time, in a given location, based on the user's availability, device capability, and personal preferences".

Art Unit: 2617

Hence the examiner interprets that Silver provides means to update the user's location as they roam (which can also be based on time-of-day). This provides means to then update their mobile's "communication state" to reflect this current time/location and thus "contact" the user in the preferred manner as per their availability/capability/preference according to said time/location (eg. the system will update the user's presence to know they're at home or the office, then said system will be able to contact the user as per pre-selected preference "profiles").

As per **claim 5**, Silver teaches claim 1 wherein the <u>current</u> location is determined using a cell-based radio network (page 2, 5th paragraph teaches "cellular location" which reads on using the cellular network to determine mobile's location as is well known in the art (see Forssen and Smyth, not cited).

As per claims 7, 12, 18 and 22, Silver teaches a server/apparatus (page 4 shows architecture for Unified Network Presence Manager which the examiner interprets as being hosted on a computer/server and the PMD/PSM/UNMM defined on page 3 as running/hosted on said server) OR Mobile Device (page 2, 1st paragraph teaches mobile devices) OR signal bearing medium with instruction (PMD/PSM/UNMM are hosted on a computer), wherein the instructions when read and executed by a processor (said computer executes instructions/software) comprising:

Presence information (page 3, see PMD - discloses that the PMD represents a common repository in which subscriber presence data is deposited/retrieved), and

A controller to determine <u>at least two</u> presence rules for a mobile device (page 3, PSM defined as containing preference logic and rule-based processes which reads on a controller), <u>each presence rule comprises at least a condition and a state, wherein a first condition is based on a location of the mobile and a second condition is based on a calendar to determine whether the conditions are met, based upon a current time and a current location of the mobile device, when either or both of the conditions are met, to update presence information for the mobile with the corresponding states (page 2, 3rd paragraph teaches a "given location" which reads on the claim. Also see page 2, 3rd</u>

Art Unit: 2617

paragraph teaches use of an agent that predicts best method of contacting the user at a particular moment in time, at a given location, based on the user's availability, device capability and personal preferences which reads on condition, also see PMD/PSM defined on page 3, STATE discussed on page 4, 3rd paragraph. See page 4, 4th paragraph teaches receiving notifications when presence data changes which reads on determining condition met/not met. Also see page 5, last paragraph which teaches a rules-based process whereby any change in an entity's network presence causes the exposed presence manager to re-evaluate any outstanding subscriptions and to notify qualifying watchers of the new presence – eg. a condition/state has been met and data will be/has been updated. This is further supported by Silver's example of a hotel guest registering -- page 5, second to last paragraph, whereby the system is checking the condition of the user's registration – eg. they have/have not registered yet - and an indicator being generated based on the state of the registration – eg. update data when state is "user has registered")

Silver teaches "A solution to this problem lies with the concept of Unified Network Presence Management in which a user's 'presence' is dynamically detected on a range of networks such that an agent can act as a personal communications manager that exploits the dynamic data trail as a user interacts with multiple communications services and devices across multiple networks. This presence data is interpreted by the agent to predict the best method for contacting the user at a particular moment in time, in a given location, based on the user's availability, device capability, and personal preferences". Hence the examiner interprets that Silver provides means to update the user's location as they roam (which can also be based on time-of-day). This provides means to then update their mobile's "communication state" to reflect this current time/location and thus "contact" the user in the preferred manner as per their availability/capability/preference

Art Unit: 2617

according to said time/location (eg. the system will update the user's presence to know they're at home or the office, then said system will be able to contact the user as per pre-selected preference "profiles").

As per **claim 9**, Silver teaches claim 7 wherein the controller is to determine the <u>current</u> location of the mobile device (page 2, 3rd paragraph teaches "in a given location" which requires the system to locate the user).

As per **claim 11**, Silver teaches claim 7 wherein the server <u>is further to use</u> the presence information in an instant messaging system (page 2, 1st paragraph teaches interfacing to and communicating with an instant messaging system).

As per **claim 14**, Silver teaches claim 13 wherein the controller is further to update the presence information with the corresponding state when <u>either or both of the conditions are met</u> (page 2, 3rd paragraph teaches "a given location" while the 5th paragraph teaches cellular location. Page 3 teaches the PMD stores presence data and the PSM uses logic/rules to determine an entity's state which reads on the claim. See page 4, 3rd paragraph which discloses the user registering whereby its location becomes known and the PSM updates location/state because the condition has changed from "logged off network" to "logged on to network". This data will be sent to the PMD repository each time a user's state changes). <u>Also see the independent claim rejections</u>, eg. newly cited paragraph which teaches time/date and location conditions being met.

As per **claim 15**, Silver teaches claim 12 wherein the presence information comprises reachability information (page 2, 3rd paragraph teaches "a given location" while the 5th paragraph teaches cellular location. Page 3 teaches the PMD stores presence data and the PSM uses logic/rules to determine an entity's state which reads on the claim. See page 4, 3rd paragraph which discloses the user registering whereby its location becomes known and the PSM updates location/state because the condition

Art Unit: 2617

has changed from "logged off network" to "logged on to network". Hence, turning one's phone on will register the user onto the network, change their presence information thus changing their reachability status).

As per **claim 16**, Silver teaches claim 15 wherein the reachability information comprises an identification of an instant messaging system to which the mobile device is connected (page 2, 1st paragraph teaches interfacing to and communicating with instant messaging systems which inherently requires identification of the system to which the mobile is connected. The examiner notes that most IM systems are Internet based which uses TCP/IP and requires IP Addressing to/from users/systems).

As per **claim 17**, Silver teaches claim 15 wherein the reachability information comprises identification of a cellular network to which the mobile device is connected (page 2, 1st paragraph teaches interfacing to and communicating with mobile telephony systems and requires the user to identify/authenticate to said mobile system. Page 5, 5th paragraph teaches GSM system registration).

As per **claim 19**, Silver teaches claim 18 wherein determining the presence rules further comprises querying the mobile phone/device for the presence rules (page 2, 5th paragraph teaches harvesting presence data from the user while page 3, PSM is the logic that will query the mobile user/device as their presence data/rule(s) changes).

As per **claim 20**, Silver teaches claim 18, wherein determining the presence rules further comprises loading the presence rules from a server (page 3, PMD/PSM/UNMM are hosted on a server and the PSM contains logic/rules processes to determine presence data and reads on the claim).

As per **claim 21**, Silver teaches claim 20 wherein the corresponding state is selected from a group consisting of available, not available, busy and do not disturb (page 2, 1st paragraph teaches instant messaging and uses these terms. Page 1, 5th

paragraph teaches knowing if a user is logged on/off and/or active which reads on available/not available. Also, the 5th paragraph teaches use of the person's calendar which would indicate if the user is busy at an appointment and if they can be disturbed or not).

As per **claim 25**, Silver teaches claim 22 wherein the location database further comprises a mapping of coordinates to <u>current</u> locations of the plurality of mobile devices (page 2, 5th paragraph teaches determining cell location of the mobile and page 3 teaches the PMD which is a database/repository of subscriber presence information. One skilled would ensure that the location information is included in the PMD database for all mobiles tracked).

As per **claim 26**, Silver teaches claim 22 wherein the presence information comprises reachability information <u>for the mobile devices</u> (page 2, 3rd paragraph teaches "a given location" while the 5th paragraph teaches cellular location. Page 3 teaches the PMD stores presence data and the PSM uses logic/rules to determine an entity's state which reads on the claim. See page 4, 3rd paragraph which discloses the user registering whereby its location becomes known and the PSM updates location/state because the condition has changed from "logged off network" to "logged on to network". Hence, turning one's phone on will register the user onto the network, change their presence information thus changing their reachability status).

As per **claim 27**, Silver teaches claim 22 further comprising the plurality of mobile devices (page 3, PMD is a repository for all of the presence information for each mobile being tracked).

Art Unit: 2617

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

<u>Claims 2, 4, 8, 10, 13 and 23</u> rejected under 35 U.S.C. 103(a) as being unpatentable over Silver and further in view of Forssen and Smyth.

As per claim 2, Silver teaches claim 1 but is silent on wherein the location is determined using a hotspot access point with which the mobile device communicates.

The examiner notes that hotspots are well known in the art and can be used to determine a person's location (as they roam into said hotspot's coverage area). Hence one skilled would use a hotspot to determine a person's location.

Forssen teaches use of cell-based systems to determine a person's location (abstract teaches use of TDOA, TOA and DOA, figure 5, 509, C1, L20-35) while Smyth teaches that cellular networks provide macro and micro cells - the former provide country wide coverage but a low bandwidth, the latter service local 'hotspots' with higher bandwidth available (C6, L10-21). Hence the one skilled would substitute a hotspot BTS for a regular BTS as taught by Forssen to determine the user's location via well known methods such as AOA, TOA, TDOA, etc.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the location is determined using a hotspot with which the mobile device communicates, to provide means for the user to roam into hotspot areas and still have its location determined via said hotspot.

Art Unit: 2617

As per claim 4, Silver teaches claim 3 but is silent on wherein the <u>current</u> location is determined using GPS.

The examiner notes that GPS location determination is well known in the art and can be used by a person in a handheld device, integrated into a cell phone, etc.. Hence one skilled would use GPS to determine a person's location.

Forssen teaches use of GPS to determine a person's location (title, figure 2 #120, figure 5 and C5, L64-67 and C13, L40-45).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the location is determined using GPS, to provide an alternate means for determining the location of the mobile device.

As per claims 8, 13 and 23, Silver teaches claim 7/12/22 but is silent on wherein the location is determined using a <u>hotspot access point</u> with which the mobile device communicates.

The examiner notes that hotspots are well known in the art and can be used to determine a person's location (as they roam into said hotspot's coverage area). Hence one skilled would use a hotspot to determine a person's location.

Forssen teaches use of cell-based systems to determine a person's location (abstract teaches use of TDOA, TOA and DOA, figure 5, 509, C1, L20-35) while Smyth teaches that cellular networks provide macro and micro cells - the former provide country wide coverage but a low bandwidth, the latter service local 'hotspots' with higher bandwidth available (C6, L10-21). Hence the one skilled would substitute a hotspot BTS for a regular BTS as taught by Forssen to determine the user's location via well known methods such as AOA, TOA, TDOA, etc.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the location is determined using a hotspot with which the mobile device communicates, to provide means for the user to roam into hotspot areas and still have its location determined via said hotspot.

Art Unit: 2617

As per claim 10, Silver teaches claim 9 but is silent on wherein the <u>controller is</u> to determine the current location using GPS

The examiner notes that GPS location determination is well known in the art and can be used by a person in a handheld device, integrated into a cell phone, etc.. Hence one skilled would use GPS to determine a person's location.

Forssen teaches use of GPS to determine a person's location (title, figure 2 #120, figure 5 and C5, L64-67 and C13, L40-45).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Silver, such that the location is determined using GPS, to provide an alternate means for determining the location of the mobile device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

STEVEM. D'AGOSTA
PRIMARY EXAMINER
10-19-04